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— 国際調査報告書

2文字コード及び他の略語については、定期発行される 各PCTガゼットの巻頭に掲載されている「コードと略語 のガイダンスノート」を参照。

(54) Title: METHOD FOR PRODUCING ACETIC ACID

(54) 発明の名称: 酢酸の製造方法

(57) Abstract: A method for producing acetic acid wherein methanol and carbon monoxide is continuously reacted in the presence of a rhodium catalyst, an iodide salt, methyl iodide, methyl acetate and water, to produce acetic acid at a formation rate of 11 mol/L·hr or more, while suppressing an acetaldehyde concentration in a liquid reaction mixture to 500 ppm or less, characterized in that the reaction carried out under the condition wherein the partial pressure of carbon monoxide in the gas phase of the reactor is 1.05 MPa or more or the concentration of methyl acetate in the liquid reaction mixture is 2 weight % or more, to thereby suppress the rate of formation of acetaldehyde to 1/1500 of that of acetic acid or less.

(57) 要約: 酢酸の製造方法は、ロジウム触媒、ヨウ化物塩、ヨウ化メチル、酢酸メチル及び水の存在下、連続的にメタノールと一酸化炭素とを反応させ、反応液中のアセトアルデヒド濃度を500ppm以下に保ちつつ、酢酸を11mol/L・hr以上の生成速度で製造する方法であって、反応器気相部の一酸化炭素分圧が1.05MPa以上の条件、又は反応液中の酢酸メチル濃度が2重量%以上の条件で反応を行い、アセトアルデヒドの生成速度を酢酸の生成速度の1/1500以下に維持することを特徴とする。

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/023268

A. CLASSIFICATION OF SUBJECT MATTER

C07C51/12(2006.01), C07C51/44(2006.01), C07C53/08(2006.01), C07B61/00 (2006.01), B01J23/46(2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) B01J23/46, C07B61/00, C07C51/12, C07C51/44, C07C53/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2006 Kokai Jitsuyo Shinan Koho 1971-2006 Toroku Jitsuyo Shinan Koho 1994-2006

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 2004-277297 A (Chiyoda Corp.), 07 October, 2004 (07.10.04), Claims; Par. No. [0012]; examples; table 1 & WO 2004/080941 A2	1-7 8-10
X Y	JP 2003-508363 A (Celanese International Corp.), 04 March, 2003 (04.03.03), Claims; table 1; Par. No. [0041]; examples; table 2 & WO 2001/016070 A1 & US 6303813 B1	1-7 8-10
X Y	JP 2002-508759 A (BP Chemicals Ltd.), 19 March, 2002 (19.03.02), Claims; examples; page 12, lines 5 to 6 & WO 98/57918 A1	1-7 8-10

ت	Further documents are listed in the continuation of Box C.		See patent lamily annex.	
* "A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
"E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
		"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is	
"O" "P"	document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed	"&"	combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family	
	of the actual completion of the international search 13 February, 2006 (13.02.06)	Date	of mailing of the international search report 21 February, 2006 (21.02.06)	
Name and mailing address of the ISA/ Japanese Patent Office		Authorized officer		
Facsi	mile No.	Tele	phone No.	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2005/023268

- (OULINEAUTO)	a). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 8-20555 A (Daicel Chemical Industries, Ltd.), 23 January, 1996 (23.01.96), Claims; examples & US 5625095 A & EP 687662 A2	8-10